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CORRECTION

Correction to: Validation of estimated glomerular filtration rate equations for Japanese children

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Misunderstandings of mean error and mean absolute error

In the original version, we mistakenly showed mean error (ME) instead of mean absolute error (MAE), thus Table 3 was incorrect. We need to revise the description of four indicators used to assess the reliability and validity of each eGFR in Materials and Methods section.

1. Mean absolute error (MAE): to evaluate the mean absolute value of the difference between each value for eGFR and mGFR.
2. Root mean square error (RMSE): to evaluate the square root of the mean square error for each eGFR and mGFR value.
3. P_{30}: to evaluate the percentage of each eGFR value within 30% of the mGFR value.
4. Mean error (ME): to evaluate mean difference between each value for eGFR and mGFR, showing visually in Bland–Altman analysis.

ME should be replaced by MAE, and Bland–Altman bias is synonymous with ME, in the original publication. The revised version Table 3 is given in this Correction.

Mistake of case selection in Bland–Altman analysis

We made a mistake in the case selection on the Bland–Altman analysis (ME) in Table 3 and Fig. 3, even though the target cases had to be as shown in Fig. 1 in all analyses. Therefore, we have corrected the Bland–Altman analysis data in Table 3 and Figure 3. In modified Table 3, the 95% confidential intervals of MEs of β_2MG-based eGFR and Cr-based eGFR using Schwartz's formula are 2.7–9.7

The original article can be found online at https://doi.org/10.1007/s10157-018-1529-7.

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Table 3 Comparison of performance using each eGFR equations, eGFR equations using in previous reports and the updated Shwartz's equation

	Absolute error (ml/min/1.73m^2) (95% CI of MAE)	RMSE (ml/min/1.73m^2)	P_{30} (%)	Bland–Altman Analysis (95% CI of ME)
Cr-based eGFR	15.8 ± 13.0 (13.5 to 18.1)	29.5	79.4	− 2.1 ± 20.4 (− 5.7 to 1.5)
Cr-based eGFR in previous report [4]	13.4 ± 11.6	17.3	84.0	–
Cr-based eGFR using Schwartz's formula	19.7 ± 21.9 (16.0 to 23.5)	29.4	64.2	9.0 ± 25.7 (4.5 to 13.6)
cystC-based eGFR	17.2 ± 16.5 (14.3 to 20.0)	23.8	71.1	0.9 ± 23.4 (− 1.3 to 7.1)
cystC-based eGFRin previous report [5]	12.6 ± 11.1	16.9	84.0	–
β_2MG-based eGFR	15.4 ± 14.3 (12.9 to 17.8)	20.9	69.5	6.2 ± 19.1 (2.7 to 9.7)
β_2MG-based eGFR in previous report [6]	13.4 ± 11.0	17.5	–	–
Ccr(2 h)-based eGFR	10.6 ± 13.0 (8.4 to 12.7)	16.7	92.9	− 1.7 ± 17.4 (− 4.8 to 1.4)
Ccr(2 h)-based eGFR in previous report [7]	–	–	–	− 0.9 (− 4.9 to 3.1)

MAE mean absolute error, *RMSE* root mean square error, *ME* mean error

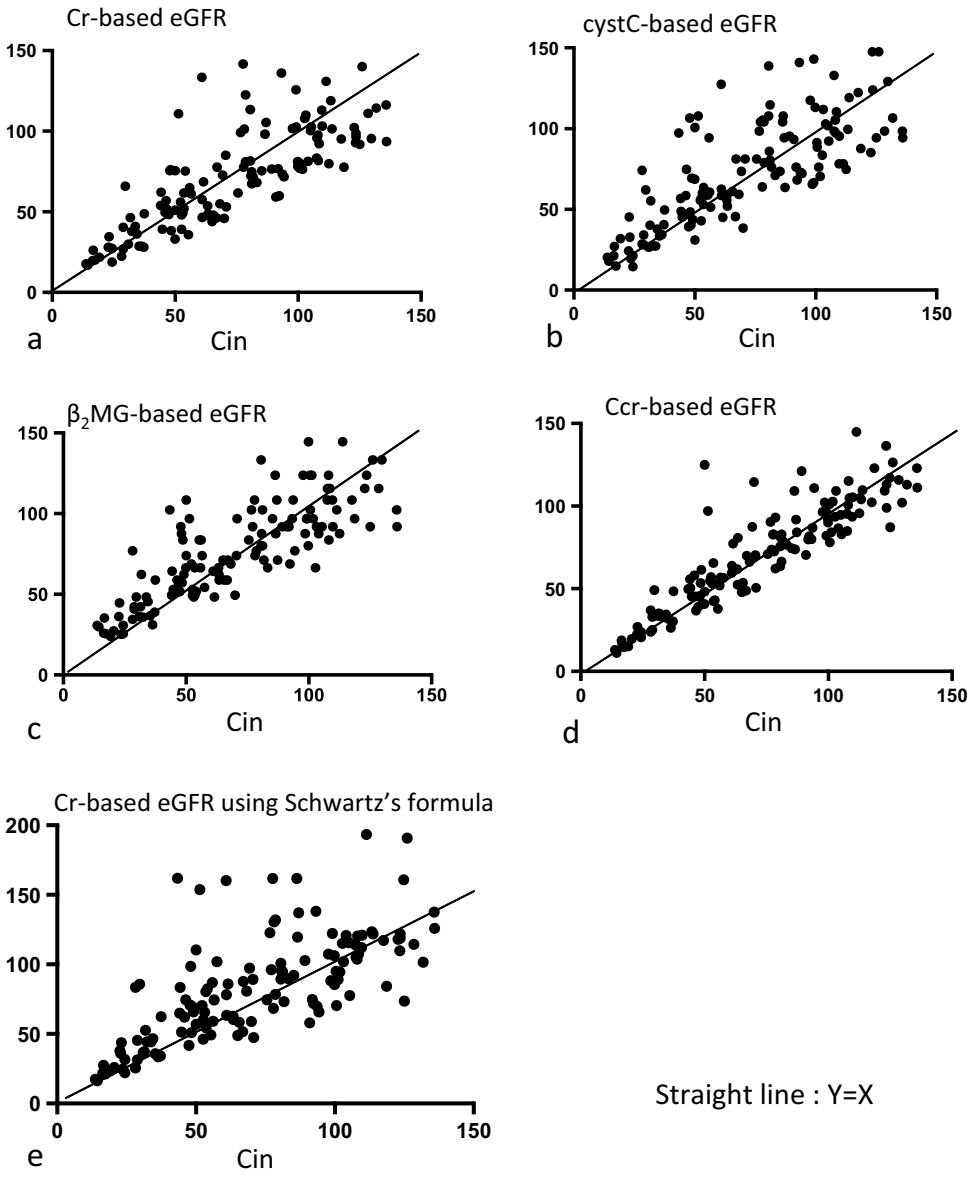

Fig. 2 Scatter plot of Cin versus 4 eGFR formulas and updated Schwartz's formula. **a** Cr based eGFR, **b** cystC based eGFR, **c** β_2MG based eGFR, **d** Ccr based eGFR, **e** Cr based eGFR using updated Schwartz's formula

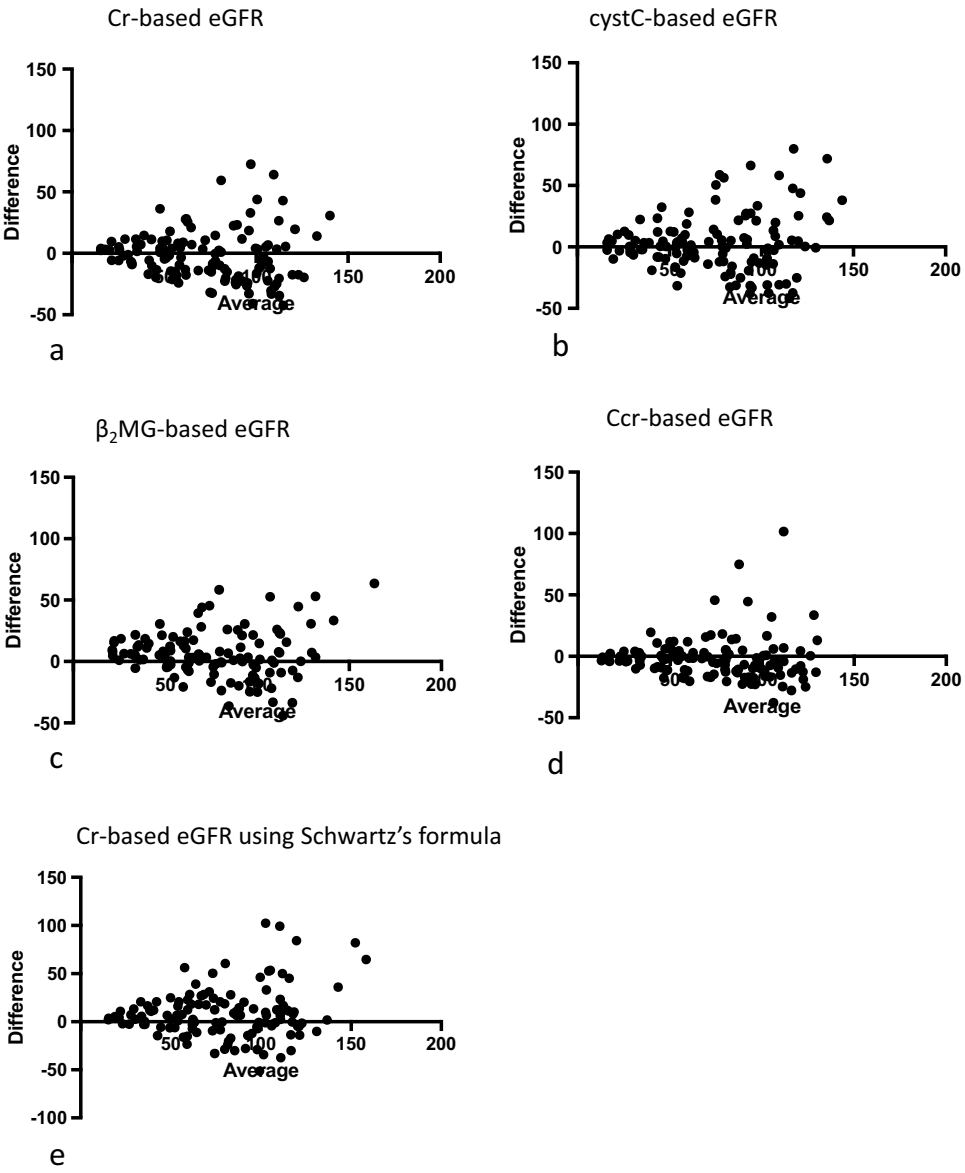

Fig. 3 Bland–Altman plot. Differences between each of the five eGFRs and mGFR. **a** Cr based eGFR, **b** cystC based eGFR, **c** β_2MG based eGFR, **d** Ccr based eGFR, **e** Cr based eGFR using updated Schwartz's formula

and 4.5–13.6, respectively, which show that each eGFR slightly but significantly overestimates actual GFR.

Wrong wording in Fig. 2-e and Fig. 3-e

In addition, "Ccr-based eGFR with Schwalt'z formula" has been corrected to "Cr-based eGFR using Schwaltz's formula" in Fig. 2-e and Fig. 3-e.

In the original publication, there was an error in the affiliation 5, the corrected affiliation should be Department of Nephrology, Toho University Faculty of Medicine, 6-11-1 Oomorinishi, Ota-ku, Tokyo 143–8541, Japan.